



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

*Am*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,700	12/20/2001	Mark Skiba	47612/LTR/G319	4165
23363	7590	04/08/2005	EXAMINER	
CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068			THAI, TUAN V	
		ART UNIT	PAPER NUMBER	
		2186		

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/027,700	MARK SKIBA ET AL.
	Examiner Tuan V. Thai	Art Unit 2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 21 March 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 9-13,20 and 21 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 9-13,20 and 21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 January 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

Art Unit: 2186

**Part III DETAILED ACTION**

***Specification***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 21, 2005 has been entered.

2. Claims 9-13 and 20-21 are presented for examination. Claims 1-8 and 14-19 have been cancelled.

3. Applicant is reminded of the duty to fully disclose information under 37 CFR 1.56.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for

Art Unit: 2186

patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 9-13, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Uemura et al. (USPN: 5,720,026); hereinafter Uemura.

As per claim 9, Uemura discloses the invention as claimed including a method for backup data stored in files as the data is updated, comprising the following conventional steps known as incremental backup (e.g. abstract): updating one of the files, temporarily storing a copy of the updated file, comparing the copy of the updated file with the file prior to updating, storing the difference in the copy of the updated file, and repeating the above steps each time when one of the files is updated (e.g. see column 1, lines 46-49; column 2, lines 25 bridging column 3, line 3);

As per claims 10 and 13, the further limitation of restoring concept wherein temporarily storing a copy of the current version of the file being restored, applying the stored difference to the stored copy of the current version to produce a copy of an earlier version of the data/file being restored (by the difference management mechanism 203 detailed below), and repeated

Art Unit: 2186

the steps until a desired version of data/file is produced are taught by Uemura starting at column 10, lines 8-13 wherein Uemura teaches to restore the incremental backup data, the incremental backup data which is temporarily saved via the pseudo device driver interface can be written into the pseudo device driver interface in sequence for the backup volume (or data file) where data to the generations preceding the incremental backup is already restored (e.g. see column 10, lines 8-13), Uemera further discloses when the incremental backup data is restored to produce a earlier copy version of data file, or when the difference map information 600 and block data gotten as the incremental backup data are written into the pseudo device driver (which can be used from a file system for file restoring; e.g. column 6, lines 36-39; also lines 23-24), the difference management mechanism 203 restores the block data (or file data) to the disk unit or the logical disk unit where the backup in the generation to reproduce the difference data is complete based on the received difference map information 600 (e.g. see column 6, lines 39-43 et seq.). By this rationale, claims 10 and 13 are rejected.

As per claims 11 and 12; the further limitation of the temporarily stored copy is stored until the next time one of the files is updated is embedded in the incremental backup operation that is taught by Uemura, since (a) it is well-known and notorious old that in the incremental backup operation, only the

Art Unit: 2186

difference of data since the most recent backup is being backed up without backing up the entire data, and (b) Uemura clearly teach that whenever incremental backup is performed, data indicating whether or not blocks have been updated is registered/stored in the difference map information 600 OVER backup generations, update data is temporarily stored/registered until the next update (e.g. see column 5, lines 21-36). By this rationale, claims 11 and 12 are rejected.

As per claim 20, Uemura discloses a method for backup data files after an original version of a file is stored in a first register/storage unit (e.g. see column 12, lines 3-6), the method comprising the step of storing an updated version of the file in a second register or a backup unit (e.g. see column 12, line 15) and storing the difference in the original and updated versions in the third register is equivalently taught as storing difference map information in the storage unit and including for each block a latest backup generation number referencing a generation which data has been updated in a block (e.g. see column 12, lines 7-10); transferring the updated version to the first register as a mirror copy thereof and repeating the above steps each time the file is updated is taught as incremental backup means for inputting, storing and transferring the backup data in the backup unit wherein the backup data including data stored in a block of the storage unit which is updated in a

Art Unit: 2186

specified backup generation based on the difference map information (e.g. see column 12, lines 17-22) wherein the difference map information is retained in the storage unit (e.g. see column 7-8);

As per claim 21, for reconstructing the original version from the last updated version stored in the second register comprises reconstructing for storage in the first register the previous version from the last updated version stored in the second register and the difference stored in the third register, transferring the previous version stored in the second register to the first register and repeating the reconstructing and transferring steps until the original version is stored in the first register is equivalently taught by Uemura as to restore the incremental backup data, the incremental backup data which is temporarily saved via the pseudo device driver interface can be written into the pseudo device driver interface in sequence for the backup volume (or data file) where data to the generations preceding the incremental backup is already restored (e.g. see column 10, lines 8-13), Uemera further discloses when the incremental backup data is restored, or when the difference map information 600 and block data gotten as the incremental backup data are written into the pseudo device driver (which can be used from a file system for file restoring; e.g. column 6, lines 23-24), the difference management mechanism 203 restores the block

Art Unit: 2186

data (or file data) to the disk unit or the logical disk unit where the backup in the generation to reproduce the difference data is complete based on the received difference map information 600 (e.g. see column 6, lines 36 et seq.).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (571)-272-4187. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

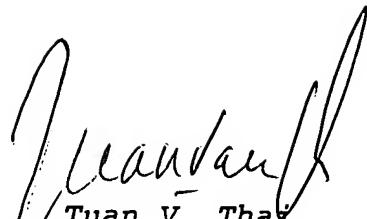
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (571)-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control number: 10/027,700

-Page 8-

Art Unit: 2186

TVT/March 29, 2005



A handwritten signature in black ink, appearing to read "Tuan V. Thai". The signature is fluid and cursive, with "Tuan" and "V." stacked vertically above "Thai".

**PRIMARY EXAMINER**

**Group 2100**